STATEMENT OF WORK FOR THE QUADCON, QUADCON RACK, and HORIZONTAL CONNECTOR

- **1.0 SCOPE**. This Statement of Work (SOW) describes the work to be performed by the contractor in conjunction with the manufacture, fabrication or obtainment, test, and delivery of three hardware components of the Marine Corps Intermediate Size Container Family (MCISCF). The components are the Quadruple Container (QUADCON), QUADCON Rack, and Horizontal Connector. Upon successful completion of First Article Testing (FAT), the Contractor will manufacture the quantities designated in Section B.
- 1.1 <u>Government representative</u>. As used in this SOW, the term "government representative" shall refer to:

Commander, Marine Corps Systems Command (COMMARCORSYSCOM)(CSLE) 2033 Barnett Ave., Suite 315 Quantico, VA 22134-5010

- 1.2 <u>Background</u>. This program was initiated to fabricate, produce, and field a state-of-the-art International Organization for Standardization (ISO) configured, Code of Federal Regulation 49 certified family of containers that will fulfill the operational requirements as specified in Revised Required Operational Capability (ROC) document for a Marine Corps Family of Cargo Containers (ROC NO. LOG 1.42A) dated 27 Aug 1991. The QUADCON container is modularly designed with lightweight durable components, with the ability to connect together to form ISO size freight container units. The QUADCON will be included in common Marine Corps Table of Equipment (T/E) allowances.
- **2.0 APPLICABLE DOCUMENTS**. The following documents of the exact date as issue specified form a part of the SOW to the extent specified herein. In the event of a conflict between the documents referenced in this paragraph, and the contents of the SOW, the contents of this SOW prevail.
- 2.1 <u>Purchase descriptions MARCORSYSCOM</u>

PD-97-0004 Container, Quadruple, (QUADCON) 7 May, 1998 PD-97-0005 Container, Connector Horizontal 7 May 1998 PD-97-0006 Quadruple Container, Rack (QUADCON Rack), 7 May 1998

2.2 MILITARY STANDARDS (MIL-STD) (MANDATORY).

MIL-STD-129M Marking for Shipment and Storage 15 June 1993

2.3 MILITARY STANDARDS/HANDBOOKS (GUIDANCE)

MIL-HDBK-1221 Manuals, Commercial

Off-the-Shelf

MIL-STD-973 Configuration Management Change Notice 3,

13 Jan 95 Basic date April 92

2.4 <u>INDUSTRY STANDARDS</u>

ASTM D 3951-95 Standard Practice for Commercial Packaging

15 July 1995

2.5 <u>OTHER</u>.

Code of Federal Regulations 49 (49CFR) 19 Sep 83 Termination of Contracts

3.0 REQUIREMENTS

- 3.1 <u>General</u>. The contractor shall be responsible for providing all materials as well as equipment, hard tooling, personnel, and facilities necessary to manufacture, fabricate, integrate, and produce the Quadruple Container (QUADCON) in accordance with (IAW) the following Purchase Descriptions; MARCORSYSCOM-PD-97-0004 Container Quadruple, MARCORSYSCOM-PD-97-0005 Container Connector Horizontal, and to the extent exercised the Quadruple Container Rack MARCORSYSCOM-PD-97-0006.
- 3.2 <u>Program Management</u>. The Contractor shall designate an individual as the Contractor's Program Manager (PM). The responsibilities of the contractors PM shall include, but are not limited to the following:
- a. This individual shall serve as the primary point of contact between the Government contracting agency and Contractor, and shall be responsible for the coordination of all Contractor activities related to the contract.
- b. The PM shall have the authority to commit the Contractor to specific courses of action and accept direction from the Government.
- c. The PM shall be the Point-of-Contact (POC) responsible for coordinating all meetings between the Government and the Contractor. The PM shall be responsible for bringing to the Government's attention, any conflicts in the Contractor's interpretation of the contract requirements (first by telephone and followed in writing) or problems that could adversely effect

the Contractor's ability to meet the stated quality, cost, or production/delivery schedule requirements.

3.2.1 <u>Program status/Program review</u>. The Contractor shall hold reviews with the Government at the Contractor's facility. The scheduling of the meetings shall be upon mutual agreement between the Contractor and the Government. (MIL-STD-973 may be used for guidance to determine content of the reviews). The Government will have the option to cancel any meeting, or to require meetings to be scheduled at critical points in the project. It shall be the contractor's responsibility to prepare a proposed agenda, furnish the necessary facilities, and prepare written minutes of each conference or review to include but not be limited to In-Process Review (IPR), First article and production acceptance testing.

(DI-MGMT-80227, Contractors Progress Status and Management Report)

3.2.2 <u>Post Award Conference</u>. The Contractor shall be prepared to host a two day meeting with Government representatives at his facility to discuss the contract execution.

(DI-ADMN-81249A, Conference Agenda)

(DI-ADMN-81250A, Conference Minutes)

- 3.3 Quality Management System. The Contractor shall establish and maintain a Quality Management System consisting of an Inspection Systems Requirements for the QUADCON, Connector, and QUADCON Rack. Inspections and special tests and examinations shall be completed on all contractor-furnished equipment. The Contractor's Quality Management System and Inspection System Requirements shall include sampling procedures and schedules necessary to meet required standards and tests. The Contractor's program for quality and inspection management shall apply both to equipment manufactured by the contractor and equipment procured from subcontractors and vendors. The Contractor's Quality Management System, shall as a minimum:
- a. Establish an inspection system that provides for the prevention and detection of problems that could result in unsatisfactory equipment/system performance, utilize sampling procedures, initiate timely and effective corrective action, and monitor the implementation of this corrective action.
- b. Provide for quality assurance representation/participation and support during quality audits, configuration audits, material review boards, and configuration control boards.
- c. Provide procedures for the control of subcontractors, vendors, and suppliers to include auditing, inspections, and defect resolution.
- d. Develop End Item Inspection Records that show the items to be inspected at final inspection, who inspected the item, and date of the inspection.

- e. Ensure that personnel responsible for manufacture, inspection, or special skills are certified prior to performing these functions. A list of skills and personnel requiring certification shall be established and maintained.
- f. Plan, schedule, conduct, support, and document all tests necessary to demonstrate compliance with applicable purchase descriptions. The Government representative shall be kept advised of all test schedules and shall be permitted to review all test documentation and to witness all tests with designated Government personnel.
- 3.4 <u>International Convention for Safe Containers</u>. The contractor shall submit Product Drawings of their container and sample units of the QUADCON and QUADCON connector as well as a detailed Quality Control Plan to an International Convention for Safe Containers (CSC) certification authority. The certification authority will review and evaluate the drawings, conduct tests on the container and review the contractors quality control plan. The CSC certification authority will then determine if the container meets all of the requirements for Code of Federal Regulations 49 certification as a freight container. Only certified containers shall be acceptable for delivery.
- 3.5 <u>Configuration management (CM)</u>. The Contractor shall implement and maintain an internal configuration management program for the QUADCON, Connector, and QUADCON Rack throughout the life of the contract. MIL-STD-973 Appendix D, paragraph 5.2 may be used as a guide for the Contractor's configuration management program.
- 3.5.1 <u>Configuration control</u>. The Contractor shall use configuration control to manage proposed changes. The Contractor shall designate a CM representative who shall serve as the primary point of contact to the Government for all matters pertaining to CM. Configuration control shall be used to document the impact of proposed changes and to update configuration documentation. The Functional Configuration Baseline (FCBL) is established by the PD and the contract. The Product Baseline shall be established upon successful completion of FAT and Government acceptance of the report. The Contractor agrees not to alter the design in form, fit, or function without prior approval from the Government.
- 3.5.2 <u>Engineering change proposals</u>. ECPs shall be submitted by the contractor, and shall be limited to those which are necessary or offer significant benefit to the Government.
- 3.5.2.1 <u>Class I ECPs</u>. Class I ECPs shall be submitted when changes are required to:
 - a. Correct deficiencies
 - b. Add or modify interface or interoperability requirements
 - c. Make a significant and measurable effectiveness change n operational capabilities or logistics supportablity of the system.
 - d. Effect substantial life cycle costs/savings
 - e. Prevent slippage in an approved production schedule

MIL-STD-973, paragraph 5.4.2.3, subparagraphs and Appendix D may be used as a guide in preparing Class I ECPs, except paragraphs 5.4.2.3.3.1a,b,d,5..4.2.3.5.1 and 5.4.2.3.5.3 do not apply. As a minimum, ECPs shall contain the following information:

- (1) Date prepared
- (2) ECP number
- (3) Reason for change
- (4) System designation (i.e., nomenclature, model, P/N)
- (5) Name of part (or lowest assembly) affected
- (6) Baselines affected
- (7) Title of changes
- (8) Description of change
- (9) Effect on interfaces (i.e., Interchangeability and Interoperability)
- (10) Total costs/savings
- (11) Retrofit information
- 3.5.2.2 <u>Class II ECPs</u>. Class II engineering change proposals shall be delegated to the contractor for coordination and approval by the ACO for those engineering changes which impacts none of the factors listed above. MIL-STD-973, paragraph 5.4.2.4, subparagraphs and Appendix-D may be used as a guide for preparing Class II ECPs, except paragraph 5.4.2.4.3 does not apply.

(DI-CMAN-80639B, Engineering Change Proposal)

3.5.3 Request for Deviation. The contractor shall process requests for deviation from current approved configuration documentation. Authorized deviations are a temporary departure from the requirements and do not constitute a change in an approved baseline. Submission of recurring deviations is discouraged and shall be minimized. Where it is determined that a change should be permanent, the contractor shall process an ECP. MIL-STD-973, paragraph 5.4.3, subparagraphs and Appendix E may be used as a guide for generating RFDs.

(DI-CMAN-80640B, Request for Deviation (RFD))

3.5.4 Request for Waiver. The contractor shall process Request for Waiver (RFW) when the supplies or services do not conform in all respects to the contract requirements. An item which, through error during manufacture, does not conform to the specified configuration documentation shall not be delivered unless a waiver has been processed and granted. Unless unusual circumstances exist, RFWs affecting safety will not be authorized. Submission of recurring waivers is discouraged, and shall be minimized. MIL-STD-973, paragraph 5.4.8.4, subparagraphs and Appendix E may be used as a guide for generating RFWs.

(DI-CMAN-80641B, Request for Waiver (RFW)

3.6 First article requirements

- 3.6.1 <u>First article fabrication</u>. The Contractor shall fabricate and test first article units to meet the testing requirements of the applicable PD. The quantity of first article units shall be fabricated as specified by the applicable CLINs in section B of the contract.
- 3.6.2 <u>First article test and evaluation</u>. The contractor shall conduct first article testing IAW the testing requirements of the applicable purchase description. The Government will approve the procedures prior to any testing or evaluation. Following completion of FAT, the Contractor shall prepare a test report documenting the results of the test.

(DI-NDTI-80603, Test Procedures, First Article) (DI-NDTI 80809A, Test Report, First Article)

- 3.6.3 <u>Non-conformance of first article</u>. In the event the first article fails to meet requirements, the Contractor shall propose corrective action to the Government for approval. Any failure in the inspections and tests shall be cause for the unit to be rejected. Any rejected units may be reworked and resubmitted for first article testing at the option of the Government, with all costs borne by the Contractor. Production shall not commence until all first article inspections and tests have been satisfactorily completed, and the Government has released the Contractor to production.
- 3.7 <u>Technical publications</u>. The Contractor shall provide a commercial instruction/operation and care/maintenance manual. This manual shall include a repair parts and a components list. (MIL-HDBK-1221 may be used as a guide for preparation of a technical publication.)

(DI-TMSS-80527, Commercial Off-The-Shelf Manuals)

- 3.7.1 <u>Users Manual Validation and Verification</u>. The Contractor shall validate and provide the Users Manual to the government for review and approval. The Government will verify that all manuals are accurate, and may choose to perform verification concurrently with the Contractor's validation effort. The Contractor shall provide technical/engineering support and facilities as required to aid the Government in performing the verification effort. The Contractor shall correct all discrepancies found during verification prior to acceptance of final deliverables.
- 3.7.2 <u>Supplemental Data (Option)</u>. Should commercial manuals require supplementation for Government acceptance, the contractor shall prepare supplementary material.

(DI-TMSS-80528 Supplemental Data for Commercial Off-the-Shelf (COTS) Manual)

3.8 <u>Copyright Release</u>. The Contractor shall identify copyrighted material, if any, and shall obtain the written approval of the copyright owner for use. The Contractor shall furnish appropriate copyright release giving the government permission to reproduce and use copyrighted information. When the Contractor uses a manual that covers a vendor's components or a portion thereof and the vendor's manual contains copyrighted material, the Contractor shall be responsible

for obtaining a copyright release from the vendor and providing the copyright release to the Government concurrent with the final manuals.

- 3.9 <u>Serialization</u>. Serial numbers for the QUADCON shall be requested by letter to the Government representative with a copy to the cognizant Administrative Contracting Officer.
- 3.10 <u>Packaging, Handling, Storage, and Transportation (PHS&T).</u> Items delivered under this SOW shall be preserved in accordance with ASTM D 3951-95, Standard Practice For Commercial Packaging. Marking for shipment and storage shall be in accordance with MIL-STD-129.
- 3.11 <u>Acceptance Testing</u>. The Contractor shall plan and perform acceptance testing on each lot in accordance with the PDs. Additionally, deliverables maybe randomly selected by the Government for testing. Acceptance testing shall verify requirements set forth in the PDs. The Contractor shall record results in a test inspection report.

(DI-NDTI-80603, Test/Inspection Procedures, Production Acceptance (DI-NDTI-80809A, Test/Inspection Report, Production Acceptance)

- 3.12 Engineering Data for Provisioning (EDFP). Engineering Data For Provisioning (EDFP). EDFP is technical data used to describe parts/equipment and consists of data such as specifications, standards, drawings, photographs, sketches and descriptions, and necessary assembly and general arrangement drawings, schematic drawings, schematic diagrams, wiring and cable diagrams needed to indicate the physical characteristics, location, and function of the item. EDFP shall be provided for each item in the commercial manual (first appearance only). As a minimum, EDFP must provide the following:
 - a. Technical identification of items for maintenance support considerations;
 - b. Preparation of item identification for the purpose of assigning National Stock Numbers;
 - c. Review for item entry control;
 - d. Standardization;
 - e. Review for potential interchangeability and substitutability;
 - f. Item management coding;
 - g. Preparation of allowance/issue lists;
 - h. Initial procurement from the contractor or original manufacturer.
- 3.12.1 <u>EDFP Order of Precedence</u>. The contractor shall furnish EDFP in the following order of precedence:
 - (a) Government or recognized industry specifications or standards;
 - (b) Engineering drawings;
 - (c) Commercial catalogs or catalog descriptions;
 - (d) Sketches or photographs with brief descriptions of dimensional, materiel, mechanical, electrical, or other descriptive characteristics.

When sketches or photographs are provided for an assembly, a bill of material shall also be provided.

3.12.2 <u>EDFP Proprietary Rights</u>. EDFP shall be marked in such a manner as to identify the proprietary rights (limited or unlimited) in accordance with paragraph 9-202.3(c) of the Defense Acquisition Regulation.

Note: EDFP shall not be provided when the item is Identified as a Government specification or standard which completely describes the item including its dimensional, mechanical, and electrical characteristics or when found to have a National Stock Number with a type 1 item identification.

(DI-ALSS-81530, Logistics Management Information Data Summary)